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UNITED STATES DISTRICT COURT

NORTHERN DISTRICT OF CALIFORNIA

SPACE DATA CORPORATION,

Plaintiff,

v.

ALPHABET INC., et al.,

Defendants.

Case No.16-cv-03260-BLF (NC)

AMENDED ORDER GRANTING IN PART AND DENYING IN PART GOOGLE'S MOTION TO STRIKE; ORDER GRANTING GOOGLE'S ADMINISTRATIVE MOTIONS TO SEAL

Re: Dkt. No. 364, 365, 369

Defendants Alphabet Inc., Google LLC, and Loon LLC (collectively, "Google")

move to strike portions of an expert report by Dr. Sam Pullen, plaintiff Space Data Corp.'s

expert. *See* Dkt. No. 365. Google argues that the challenged portions of Dr. Pullen's

report advances new, previously undisclosed theories regarding the '706 and '193 patents.

For the reasons discussed below, the Court GRANTS in part and DENIES in part Google's

motion to strike.

I.   Background of Discovery Dispute

The factual and procedural background is well-known to the parties and the Court

will not recite it in full here.

On November 15, 2018, the parties submitted a joint letter brief regarding Google's

motion to strike portions of Dr. Pullen's expert report. *See* Dkt. No. 365. The Court held a

hearing regarding Google's motion on December 5, 2018. *See* Dkt. No. 375.

II.   Legal Standard

Patent Local Rule 3 requires parties claiming patent infringement to disclose their infringement contentions early in a case and streamlines discovery by replacing the "series of interrogatories that [parties] would likely have propounded" without it. *Network Caching Tech. LLC v. Novell Inc.*, No. 01–cv–02079 VRW, 2002 WL 32126128, at *4 (N.D. Cal. Aug. 13, 2002). It is "designed to require parties to crystallize their theories of the case early in the litigation and to adhere to those theories once they have been disclosed." *Nova Measuring Instruments Ltd. v. Nanometrics, Inc.*, 417 F.Supp.2d 1121, 1123 (N.D. Cal. 2006). Thus, a party may not use an expert report to introduce new infringement theories, new infringing instrumentalities, new invalidity theories, or new prior art references not disclosed in the parties' infringement contentions or invalidity contentions. *See, e.g.*, *Dynetix Design Solutions, Inc. v. Synopsys, Inc.*, No. 11–cv–05973 PSG, 2013 WL 4537838, at *2 (N.D. Cal. Aug. 22, 2013) (striking plaintiff's infringement theories relating to infringing features within the accused products that were not disclosed in plaintiff's contentions); *Volterra Semiconductor Corp. v. Primarion, Inc.*, 796 F.Supp.2d 1025, 1119 (N.D. Cal.2011).

Specifically, Patent Local Rule 3–1 requires a party claiming patent infringement to serve a "Disclosure of Asserted Claims and Infringement Contentions." This disclosure must include "[e]ach claim of each patent in suit that is allegedly infringed by each opposing party, including for each claim the applicable statutory subsections of 35 U.S.C. § 271 asserted[.]" *Id.* "This identification shall be as specific as possible." *Id.* Claimants must also serve "[a] chart identifying specifically where each limitation of each asserted claim is found. . . ." *Id.*

III.   Discussion

A.   '706 Patent

The '706 patent discloses systems and methods for terminating a balloon's flight and recovering the platform. *See* Dkt. No. 250-19. Relevant here, claim 1 of the '706 patent requires "at least two power sources each configured to provide power to at least

one of the first and second flight-termination devices." *See id.* at 18. Space Data's

infringement contentions state that ███████████████████████████████████

██

██ *See*

Dkt. No. 369-7 at 2.[1]

Google seeks to strike paragraph 622 to 632 of Dr. Pullen's report, which elaborates

on his theory that Google's Loon infringes on Space Data's '706 patent. *See* Dkt. No. 369-

5 ¶¶ 622–32. In those paragraphs, Dr. Pullen describes Loon's design and his inspection

of the balloon. *See id.* ¶¶ 622–30. Dr. Pullen ultimately concludes that ██████████

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██

See id. ¶ 632.

Google argues that Dr. Pullen's opinion improperly advances a new theory

identifying the set of ███████████ as the requisite power sources for the termination

devices. This argument is unavailing. Dr. Pullen's opinion initially identifies the

████████████████ as the power source. *See id.* ████████████████████████

██████████████████████████ *see also id.* ¶ 631. But he immediately

clarifies in the following sentence that ████████████████████████████████████

████████████████████████████ *Id.* ¶ 632. Thus, although Dr. Pullen

concludes that the ███████████ are the ultimate source of power for the termination

devices, he nonetheless draws a direct link between the batteries and the devices. *Cf.*

MediaTek Inc. v. Freescale Semiconductor, Inc., No. 11-cv-05341-YGR, 2014 WL

2854773, at *4 (N.D. Cal. June 20, 2014) (report excluded because expert "never mentions

the 'power supply' limitation is met based on how the chip is connected to the [power

supply], or . . . the connections from the chip to the . . . power supply"). Dr. Pullen's

opinion is not a new theory of infringement.

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[1] All page numbers in this order refers to the automatically generated CM/ECF page
numbers unless otherwise indicated.

1   Accordingly, the Court DENIES Google's motion to strike with regards to the '706

2   patent.

3   **B.   '193 Patent**

4   The '193 patent discloses methods for controlling the altitude of free floating

5   balloons. *See* Dkt. No. 250-27. Claim 1 of the '193 patent contains four parts. *See id.* at

6   55. Relevant here, claim element 1(b) requires "determining locations of one or more

7   neighbor balloons relative to the determined location of the target balloon . . ." *Id.*; *see*

8   *also* Dkt. No. 352 at 26 (court order construing claim 1 of '193 patent). Claim element

9   1(d)[2] requires "determining the desired movement of the target balloon based on the

10   determined locations of the one or more neighbor balloons relative to the determined

11   location of the target balloon . . ." *Id.*

12   Space Data's infringement contentions for claim element 1(b) state that "Google

13   Loon 'flocks' balloons together . . . [t]o maintain its 'flocks' and network, Google

14   determines the location of balloons relative to other balloons in the 'flock' and network."

15   Dkt. No. 369-3 at 2. Space Data defines "target balloons" as "balloons to be moved

16   relative to other balloons." *Id.* For claim element 1(d), Space Data's contentions state that

17   "Google determines the desired movement of target balloons; *i.e.*, the balloons to be

18   moved, in its 'flock' and network relative to other balloons in the 'flock' and network."

19   *Id.* at 17.

20   Google concedes that paragraphs 360 to 369 of Dr. Pullen's report are related to

21   Space Data's contentions and do not seek to strike those portions. *See* Dkt. No. 365 at 2.

22   Rather, Google argues that paragraphs 340 to 359 and 370 to 377 describe new theories of

23   infringement and should be excluded. *See id.* at 2–3. Specifically, Google attacks Dr.

24   Pullen's opinion that Google Loon infringes the '193 patent because it (1) has functionality

25   that assigns balloons to a ▮▮▮▮▮▮▮▮▮▮ (*see* Dkt. No. 369-5 ¶¶ 340–57); (2) uses

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   [2] In his report, Dr. Pullen refers to this claim element as element 1c1. *See, e.g.*, Dkt. No.
   369-5 at 8. However, the parties' joint letter brief and Space Data's infringement

28   contentions refer to this claim element as 1(d). *See, e.g.*, Dkt. No. 365 at 2; Dkt. No. 369-3
   at 17. The Court will follow the parties' practice and refer to this element as 1(d).

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1   specific flight steering algorithms to determine how to move a balloon (*see id.* ¶¶ 358–59);

2   and (3) uses a ██

3   (*see id.* ¶¶ 370–77). The Court addresses each theory in turn.

4   **1.   Assignment of Balloons ██████████████████**

5   Google first challenges paragraphs 303 to 311 of Dr. Pullen's report. Paragraphs

6   303 to 307 generally explain that Google's Loon Mission Control "continuously

7   determines the location of each and every one of Loon's balloons [and] [e]ach balloon's

8   location, expressed as a three-dimensional point in time, is relative to every other balloon's

9   location expressed in the same manner." *Id* ¶ 305. Then, in paragraphs 308 to 3011, Dr.

10 Pullen explains how Loon's fleet management system, specifically Oregon Dispatcher,

11 ██████████████████████████████████   *See id.* ¶¶ 308–11. Dr. Pullen concludes that

12 Google's use of Oregon Dispatcher infringes upon claim element 1(b): "determining [the]

13 locations of one or more neighbor balloons relative to the determined location of the target

14 balloon." *Id.* ¶ 302. He also concludes that this infringes upon claim element 1(d):

15 "determining a desired movement of the target balloon based on the determined location of

16 the one or more neighbor balloons . . . ." *Id.* ¶¶ 337, 341.

17   Here, Dr. Pullen's analysis in paragraphs 304–307 merely incorporates his analysis

18 from other, unchallenged portions of his report and provides an example. *See, e.g.*, *id.*

19 ¶ 304 ("In particular, see the evidence cited in elements 1a . . . ."); ¶ 305 ("As explained in

20 the ██████████████████████████████████ sections in the Detailed

21 Description of Loon Technology above, and in element 1a above . . . ."); ¶ 307 n.555 ("A

22 detailed description of how Loon's fleet management system . . . makes these decisions

23 can be found in the ████████ section of the Detailed Discussion of Loon Technology

24 above."). Because Google does not challenge Dr. Pullen's analysis for element 1a or the

25 ████████ section of his report, the Court declines to strike paragraphs 304–307.

26   On the other hand, Dr. Pullen's analysis in paragraphs 308 to 310 is not related to

27 Space Data's infringement contentions for claim element 1(b)—*i.e.*, how Google

28 "*determines* the location of balloons relative to other balloons in the 'flock' and network."

1   Dkt. No. 369-3 at 2 (emphasis added). Rather, this portion of Dr. Pullen's opinion

2   paragraphs describe how Google determines which balloons should be assigned to ████

3   ███, *once the location of those balloons are already determined*. As explained succinctly

4   by Dr. Pullen, "Google's fleet management system *considers the relative locations of those*

5   *neighbor balloons* in terms of ████████████████████████████████ Dkt.

6   No. 369-5 ¶ 309 (emphasis added). Based on that information, Google's fleet management

7   system then assigns balloons based on ████████████████████████████

8   ██████████████████████████████ *Id.* ¶ 310 (emphasis added).

9   And "[t]hus, Google *considers the relative locations* of the balloons in deciding which

10 ████████████████████████████ *Id.* (emphasis added). But "considering" the

11 location of a balloon is not the same as "determining" the location of a balloon. Dr.

12 Pullen's opinion essentially describes the next step of the balloon-moving process, not

13 element 1(b). In other words, Dr. Pullen's opinion relates to *which* balloon to move, not

14 *where* that balloon is located.

15   Similarly, Dr. Pullen's opinion does not explain how Oregon Dispatcher's

16 assignment functionality relates to claim element 1(d). Indeed, in a later, uncontested

17 portion of Dr. Pullen's report, he clarifies that Oregon Dispatcher ████████████

18 ██████████████████████████████ *See id.* ¶ 349. According to

19 Dr. Pullen, ██

20 ██████████████████ not Oregon Dispatcher's balloon-assignment functionality.

21 *See id.* ¶ 357–58. To be sure, before a fleet management system can "determin[e] a

22 desired movement of [a] target balloon" (*id.* ¶ 337), it must first determine which balloon

23 to "target." But ultimately, Space Data's infringement contentions for element 1(d) relate

24 to "determining" desired movement, not targeting a balloon.

25   This is made clearer by the parties' discussion of "flocking" as it relates to Space

26 Data's 1(d) contentions. At the hearing and in the parties' brief, Space Data argued that its

27 infringement contentions specifically call out "flocking" and Google's fleet management

28 system's assignment functionality is part of what constitutes "flocking." *See* Dkt. No. 365

6

1   at 4. Space Data described "flocking" as "getting there and staying there" or "sending and

2   clustering." In support of its definition, Space Data quoted portions of Google Loon's

3   CEO, Alistair Westgarth's, deposition. *See id.* In the deposition transcript Space Data

4   provided to the Court, Westgarth offered three different descriptions of "flocking." He

5   described it as "staging," █████████████████████████████

6   ██████████████████████████████████   *See* Westgarth Depo. at 182:2–183:5.

7   Google contests the breadth of Space Data's definition of "flocking." *See* Dkt. No. 365 at

8   3. Even if the Court accepts every one of Space Data's proposed descriptions of

9   "flocking," none of those descriptions describe Dr. Pullen's analysis in paragraphs 308 to

10   310 of his report.

11   Accordingly, the Court GRANTS Google's motion to strike and excludes

12   paragraphs 303 to 310 of Dr. Pullen's report.

13   **1.**   ██████████████████████████████

14   Google next challenges paragraphs 358 and 359 of Dr. Pullen's report. Paragraph

15   358 ██

16   ████████████████████   *Id.* ¶ 358. Paragraph 359 concludes that "each of [those]

17   algorithms, in concert with Oregon Dispatcher, determines how to move the balloon based

18   on its location relative to the locations of one or more neighbor balloons to manage a fleet

19   of balloons" in a two-step process. *Id.* ¶ 359. Thus, according to Dr. Pullen, ████████

20   ████████████████████████   infringes claim element 1(d), "determin[ing] the

21   desired movement of target balloons," and element 1(b). *Id.* ¶¶ 304, 337, 359.

22   Google argues that those paragraphs should be excluded because Space Data's

23   contentions do not accuse ████████████████████████   *See* Dkt.

24   No. 365 at 3. Dr. Pullen's analysis, however, ████████████████████

25   ███████████████████   Rather, Dr. Pullen focuses on how ████████████

26   ██

27   ████████████████████   *See* Dkt. No. 369-5 ¶¶ 358, 359. He concludes that it

28   is "Google's *use* of each of the Seeker algorithms, in concert with Oregon Dispatcher" that

1   "satisfies the limitation of element [1(d)]." *Id.* ¶ 359 (emphasis added). Dr. Pullen's

2   single mention of Oregon Dispatcher's ████████████████████████████ does

3   not change the nature or scope of his analysis.

4   Accordingly, the Court DENIES Google's motion to strike paragraphs 358 and 359

5   of Dr. Pullen's report.

6   **2.   Google's "Staging" Technique**

7   Finally, Google challenges paragraphs 370 to 376 of Dr. Pullen's report. Those

8   paragraphs analyze Google's use of "staging." Staging is a multi-part technique that

9   allows Google to coordinate the movements of the balloons in its fleet. ████████

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13 ████████████████████ *Id.* ¶ 370. As part of that process, ████████████████

14 ██ *Id.* ¶ 371. Staging

15 allows Google to ██

16 ████ *Id.* ¶ 373 (quoting exhibit). Dr. Pullen concludes that staging uses "each balloon's

17 determined location to determine how to move each balloon . . ." and therefore infringes

18 on claim element 1(d) and 1(b). *Id.* ¶¶ 304, 376.

19   Google argues that Space Data's infringement contentions did not put them on

20 notice of theories related to balloon dispatch in general. *See* Dkt. No. 365 at 3. According

21 to Google, Space Data's reference to "flocking" cannot be a "magic word" that

22 encompasses everything Google does to manage balloons, including "staging." *Id.* Space

23 Data counters that "flocking" indeed has such a broad scope. As the Court recounted

24 above, Space Data quotes Westgarth and various documents defining "flocking" in broad

25 terms. *See id.* at 4.

26   At its core, Google's argument is really a challenge to the scope of Space Data's

27 claim elements and infringement contentions. Google, however, cannot challenge the

28 scope of Space Data's claim on a discovery motion. Such a challenge is appropriately

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1   suited for claim construction or a decision on the merits of Space Data's patent. Google

2   did not challenge the definition or scope of the term "determine/determining" at the claim

3   construction stage and it cannot belatedly do so here. *Cf.* Dkt. No. 352 at 13–18

4   (September 6, 2018, order of District Court Judge Freeman construing terms in the '193

5   patent). And neither party presented any evidence suggesting that the Court should accord

6   the term "determine/determining" any special definition other than its ordinary meaning.

7   Moreover, at the claim construction stage, Judge Freeman construed Space Data's

8   claim as accusing functionality that "control[s] balloons in a constellation of airborne

9   communication platforms" or "manag[ing] a fleet of balloons." *See id.* at 16, 26.

10   Therefore, whatever the appropriate definition or scope of "flocking" may be, Space

11   Data's infringement contentions for element 1(d) must be understood in connection with

12   controlling or managing a fleet of balloons. With that in mind, the Court turns to Dr.

13   Pullen's opinion.

14   The crux of Google's "staging" technique, as explained by Dr. Pullen, involves

15   moving some balloons "straight [at its] target" if they are far from the target location,

16   while "stall[ing]" other balloons if they are close. Dkt. No. 369-5 ¶ 370. Although certain

17   aspects of "staging" are not directly related to element 1(d), such as designating a

18   ▮▮▮▮▮▮▮▮▮▮▮▮▮▮ the focus of Dr. Pullen's analysis is the staggered movement of

19   balloons based on their proximity to the target location. Dr. Pullen's analysis also

20   describes "staging" as ▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮

21   ▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮" *Id.* ¶¶ 370–71, 375. This

22   description essentially describes balloon fleet management. Thus, the Court will not strike

23   this portion of Dr. Pullen's analysis.

24   Accordingly, the Court DENIES Google's motion to strike paragraphs 370 to 376

25   of Dr. Pullen's report.

26   **C.   Google's Administrative Motions to Seal**

27   Google moves to seal portions of the joint letter brief and exhibits to the brief. *See*

28   Dkt. Nos. 364, 369. The proposed redactions are based on confidential information

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1   relating to the algorithms and techniques used by Google Loon.

2   There is a presumption of public access to judicial records and documents. *Nixon v.*

3   *Warner Commc'ns, Inc.*, 435 U.S. 589, 597 (1978). Access to motions and their

4   attachments that are "more than tangentially related to the merits of a case" may be sealed

5   only upon a showing of "compelling reasons" for sealing. *Ctr. for Auto Safety v. Chrysler*

6   *Grp., LLC*, 809 F.3d 1092, 1101–02 (9th Cir. 2016). Conversely, filings that are only

7   tangentially related to the merits may be sealed upon a lesser showing of "good cause." *Id.*

8   at 1097. "In general, 'compelling reasons' sufficient to outweigh the public's interest in

9   disclosure and justify sealing court records exist when such 'court files might have become

10   a vehicle for improper purposes,' such as the use of records to gratify private spite,

11   promote public scandal, circulate libelous statements, or release trade secrets." *Kamakana*

12   *v. City & Cty. of Honolulu*, 447 F.3d 1172, 1179 (9th Cir. 2006) (quoting *Nixon*, 435 U.S.

13   at 598).

14   Under Rule 26(c), a trial court has broad discretion to permit sealing of court

15   documents for, among other things, the protection of "a trade secret or other confidential

16   research, development, or commercial information." Fed. R. Civ. P. 26(c)(l)(G). The

17   Ninth Circuit adopted the definition of "trade secrets" set forth in the Restatement of Torts,

18   finding that "[a] trade secret may consist of any formula, pattern, device or compilation of

19   information which is used in one's business, and which gives him an opportunity to obtain

20   an advantage over competitors who do not know or use it." *Clark v. Bunker*, 453 F.2d

21   1006, 1009 (9th Cir. 1972) (quoting Restatement (First) of Torts § 757 cmt. b).

22   Here, the Court addresses two motions to seal portions of the parties' joint letter

23   brief and exhibits relating to that brief. The sealed portions are more than tangentially

24   related to the merits of the case. Therefore, the compelling reasons standard applies to this

25   sealing motion. *Foltz v. State Farm Mut. Auto Ins. Co.*, 331 F.3d 1122, 1136 (9th Cir.

26   2003) (applying the compelling reasons standard at summary judgment).

27   Sealing motions must be "narrowly tailored to seek sealing only of sealable

28   material." Civil L.R. 79-5(b). A party moving to seal a document in whole or in part must

1   file a declaration establishing that the identified material is "sealable." Civil L.R. 79-

2   5(d)(1)(A). Merely stating that a party designated material as confidential under a

3   protective order is insufficient by itself to seal a document. *Id.*

4   The highlighted portions of the parties' letter brief and exhibits contain technical

5   proprietary confidential information relating to Google Loon, including confidential

6   research and development. *See* Dkt. No. 364-1 ¶ 5; *see also* Dkt. No. 369-1 ¶ 5. The

7   Court also finds the sealing requests to be narrowly tailored. Based on the Court's review

8   of Google's sealing motions, the Court finds compelling reasons sufficient to outweigh the

9   public interest in disclosure. Accordingly, the Court GRANTS the request to seal the

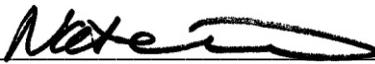10 highlighted portions in Dkt. Nos. 364 and 369.

11 **IV.   Conclusion**

12   The Court GRANTS in part Google's motion to strike and excludes paragraphs 308

13 to 310 of Dr. Pullen's report. The Court otherwise DENIES Google's motion to strike.

14 The Court GRANTS Google's administrative motions to seal.

15   This order is ORDERED emailed to counsel and is issued temporarily under seal.

16 The parties shall meet and confer and propose redactions to this order by December 17,

17 2018. After December 17, the Court will issue a public version of this order after

18 considering the parties' proposed redactions.

19   **IT IS SO ORDERED.**

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21 Dated: December 17, 2018

22   NATHANAEL M. COUSINS
                               United States Magistrate Judge

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United States District Court
Northern District of California

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